

professional solutions

An Information Service For The Professional

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Apple's Communications Network Grows

By Russ Aldrich and Joy McCully

Regardless of office size, there is a set of five "core" functions that most business professionals perform to process information: electronic spreadsheet calculations, word processing, database (file) management, graphics, and communications. Project management is a sixth important office function, just outside the core. For all six functions, you can find software that will work on an Apple personal computer.

The Apple II, the most widely used of Apple's office systems is famous for the thousands of fundamental and specialized software packages that run on it. For information-processing tasks that require larger computer memory, business professionals have come to rely on the Apple III. With its 256 kilobytes of memory and hard-disk storage capability, the Apple III gets big jobs done fast.

Then there's the Lisa, combining all the core office requirements—and project management—into an easy-to-learn, easy-to-use integrated set of packages. It's designed for the novice user, the user who requires high-quality graphics for presentations, and the experienced user who appreciates and requires integrated software.

The Tie That Binds...

All of these Apple products, whether used in small businesses or in the largest of corporations, must use information. The role of communications and networks is to transmit this information quickly and easily.

Different types of communications provide different ways of transferring and exchanging information between

people, whether they're located close to one another or many miles apart.

For co-worker communications, a local area network provides the kind of document transfer and information interchange that facilitates informed decision making. AppleNet, which will be Apple's local area network, will provide just such a facility.

Based on accepted networking techniques, AppleNet offers document transfer and sharing of expensive peripherals within a small to medium-size department.

AppleNet can link together any of Apple's microcomputers, as well as Apple's Daisy Wheel and Dot Matrix Printers. And as your business needs grow, so can AppleNet, by extension through "gateways"—the means

of connecting one network to another.

AppleNet uses gateways to talk to other networks, too. In later releases of AppleNet, electronic mail and other specialized network services will be available.

Networking will allow communication of all kinds of information—by linking the Apple II, Apple III, and Lisa together to transfer and exchange documents, and by providing electronic mail.

Microcomputers have provided the necessary tools to enable people to develop and analyze information to perform their jobs better and more enjoyably; networking provides the means to share that information and analysis effectively.

Across the Miles, Too

Apple has the answer across the

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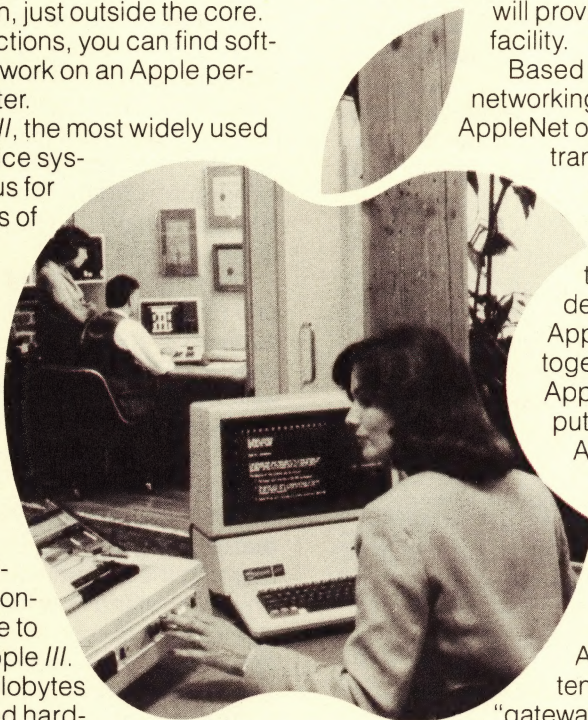
Apples and PEARs at Thomson McKinnon

By Jack Appel

When one bemoans a missed opportunity, it is so easy to say, "Hindsight is better than foresight." The real rewards, however, belong to those who have the foresight to recognize trends and prepare to meet them head on. This was the situation in the early 1960s for Thomson McKinnon, then a medium-size member firm of the New York Stock Exchange.

The firm's executive committee realized that the volume of future trading was going to be so large that only those who were well prepared would be able to survive and prosper. The committee decided it was time to start taking the necessary steps to strengthen the firm's position. The key would be data processing; the cost would be high to have the capability to handle the coming volume—no matter when it would arrive.

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Apple's Communications

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miles as well. Phone lines provide the most common type of communication today, and Apple has developed a variety of products that allow Apple computers to transmit data, via phone lines, to large-scale computing environments. These datacommunications products connect the individual to remote locations and/or to corporate mainframes.

The Apple "Access" series offers a range of communications solutions for DEC, IBM, and other mainframes. The Access 3270 package, when used in conjunction with the Apple 3270 Cluster Controller Emulator, provides IBM® 3278-2 terminal emulation for the large-scale computer environment.

Access III, on the other hand, can be used in almost any asynchronous communications application. This package allows the Apple III to communicate with a variety of computers, timesharing systems, and information networks, such as Tymnet®, Telenet, and Dow Jones News/Retrieval® Service. Access III allows the Apple III to emulate DEC's VT100™ and VT52™ terminals. Furthermore, Access III can be connected to a remote computer via a modem—or directly connected—at speeds ranging from 110 to 9600 bits per second.

New to the Apple family of communications products is LisaTerminal, which connects your Lisa to a mainframe, thus allowing you to move information from the mainframe to the Lisa and vice versa. When used with the Apple Cluster Controller, LisaTerminal

provides many of the features of the IBM series 3270 interactive display stations.

Soon Apple will be providing Remote Job Entry (RJE) facilities as well as other types of distributed processing communications solutions. These products will facilitate the integration of microcomputers into network applications of all sizes.

But First...

Moving microcomputers into networks requires more than just products. It requires a good game plan: an "architecture" for the systems. To this end, Apple has been working with clients across the nation and around the world to develop systems architectures that utilize the power of the micro and the mainframe. The Lisa does this.

In addition, the Lisa Tool Kit, available later this year, will provide an applications development environment to allow the creation of integrated Lisa software compatible with existing code. This will permit Lisa users to make use of their existing software investment, while enhancing the user interface and the overall capability of the application system.

Apple III menu-oriented tools provide a similar level of functional integration for the user and the programmer. Using the powerful COBOL development system, applications programmers can produce documentation, design their codes, run and test their programs, and then connect to the mainframe to transfer the finalized applications.

Using the microcomputer as an adjunct to mainframe processing power not only takes advantage of the micro's effectiveness, but also enhances the capabilities of the person using it.

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Using the Apple as a Decision Support Tool

By Alton Cogert

Today, more and more bankers are utilizing Apple personal computers as decision support tools to allow their banks to make better decisions faster. Used in this fashion, Apples can help banks operate more productively and profitably, reduce potential losses, and identify new and profitable markets. To perform this decision support function, a bank may choose either general or specific programs.

General programs, available in most local computer stores, are designed to perform a general function. These functions could involve database management (file cabinets of information), accounting functions, or general spreadsheet applications. You can usually find programs in each of these areas.

The major advantage of these general programs is that they can be customized to some degree. In other words, you may alter the manner in which a program operates so that it performs an analysis in a particular way. Such flexibility is an important advantage.

This customization, however, requires many hours of learning and relearning the program to begin to properly understand how the program operates. Subsequently, several additional hours are required to perform the customization for a given decision support purpose. Finally, only those trained in the proper utilization of the program can effectively enter data and produce reports applicable to the analysis. This constant learning and relearning has caused many productivity-conscious bankers to turn to specific programs.

These specific programs allow the bank to make better decisions faster in a specific activity of the bank. As one might see a specialist to solve a particular problem, bankers throughout the nation are seeking and finding specific programs to solve the particular needs of the bank, such as asset/liability management, commercial credit analysis, and customer relationship profitability.

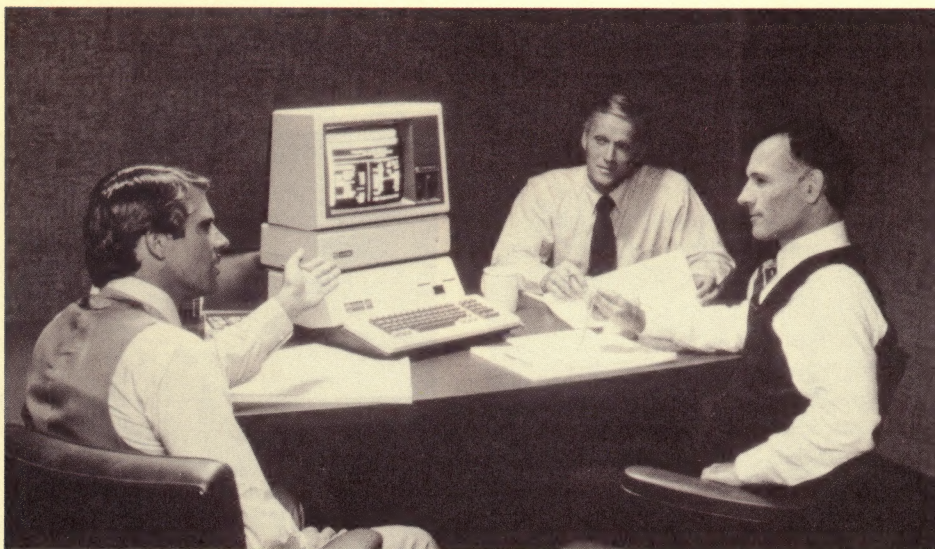
To be most useful to the bank, specific programs must meet or exceed the bank's requirements in three important categories:

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1. Conceptual. The program must perform what it is supposed to do. Ideally, it must perform the highest quality analysis possible, even while producing lean, decision-oriented reports. And those reports must be usable immediately, allowing you to make better decisions faster.

2. Technical. The program must be very simple to use. It should be designed so that within a very short period of time (ideally less than an hour) any bank employee can understand and use the program. In other words, the program should be user friendly. However, user friendliness, like beauty, may be only in the eye of the beholder. It is worthwhile to demand to see the program operate for yourself before deciding how user friendly the program really is.

3. Vendor Support. The program should be developed and supported by a firm which has an excellent reputation in the banking industry, one that understands the needs of bankers. The firm should provide initial and ongoing support for questions of both a technical and conceptual nature. This support should also include training, where applicable. Finally, program manuals and instructional materials must be written in plain, understandable language, not "computerese."

One program which meets or exceeds the requirements in all three important areas is the Commercial Credit Analysis System (CCAS) from Integrated Management Services (I.M.S.) of Orange, California. CCAS is currently in use by small community banks as well as major commercial banks nationwide. These apparently varied banks have one thing in common: the desire to make better decisions faster in the analysis of commercial credits.

One of California's largest banks is currently using the Commercial Credit Analysis System on more than 50 Apple II computers throughout its commercial loan system. The bank's Senior Vice President, Credit Administration, describes its advantages this way: "This automation will allow our commercial credit officers to use their time more effectively. It relieves them of much of the number crunching they've been required to do and frees them up to make more prospect calls and attend to the business of selling our products and penetrating the market."

In general, CCAS is a package of seven interrelated functions which allow the bank to:

- Perform historical cash-centered analyses
- Forecast short-term debt requirements
- Forecast long-term debt requirements
- Monitor term-loan covenant compliance
- Produce an RMA Data Submission
- Analyze personal financial statements
- Monitor prompt receipt of financial statements

A bank spokesman noted, "Previously much of this work had to be done by hand with pencil and calculator. What used to take hours and hours can be accomplished in minutes with computers... The best part is that this allows us to compare flow projections under different scenarios, which is very useful to us and to our customers."

CCAS improves productivity and reduces potential loan losses, while allowing the bank to identify and penetrate new business markets.

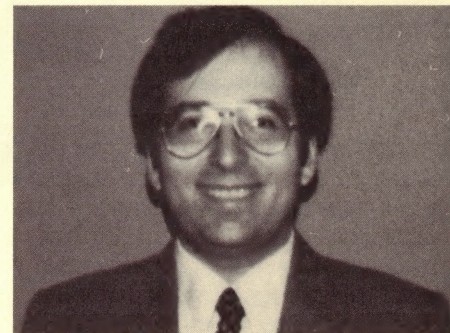
CCAS' ease of use, has been stated

by one banker, "We selected this software because it is extremely user friendly. If you can play Pac Man®, you can use this system."

Training in both how to use the Apple and how to comprehend and apply the generated information is conducted for commercial loan officers and senior clerical employees by I.M.S.

Although the bank had attempted to formulate software similar to CCAS, it sees the popularity of CCAS and the Apple growing. "This project has been in the works for seven years," stated their Senior Vice President. "We've always needed the critical kinds of analyses the system provides, and the credit officers are glad to have them. In fact, we've already received ten requests for additional machines, and we expect to make more installations soon."

Pac Man is a trademark of Bally Midway Mfg. Co.



About the author:

Alton Cogert is Vice President of Integrated Management Services, a firm dedicated to improving client-bank competitiveness and profitability through the use of microcomputers. He was previously with Union Bank, Los Angeles, in the commercial loan function.

Today's Opportunities for Brokers

By James H. Blake

Like other professionals, stockbrokers can be too busy solving mundane problems with the personal business computer to research the potential for new applications—opportunities that may have been impossible before.

A stockbroker frequently begins using a personal computer to manage mailings to prospects and/or clients with a simple database management program such as Quick File. Often the second step is to merge this mail-

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Today's Opportunities (continued)

ing list with letters written on a word processor, such as Apple Writer. Depending on the information available at the broker's desk, the next step may be to locate fundamental securities information with a program such as Market Microscope™, or technical information in the form of securities charting with a program such as Market Analyzer™—both from Dow Jones.

The last step may be to use the personal business computer to manage investment portfolios with a program such as PEAR (Portfolio Evaluation And Reporting). It may also be used for such traditional housekeeping tasks as paying bills and maintaining tax records.

A number of stockbrokers have been able to go beyond these traditional applications, however, by applying the personal business computer to meet today's opportunities. Let's take a look at a few of these more innovative applications.

Innovative Software for Financial Applications

Over the past decade many brokers have wanted to do tax and financial planning for their clients without sending out the information to a computer consulting service, or spending several days in-house creating each plan. Either way, changing one or more of the alternatives in a plan took almost as much time as the original plan. With the personal business computer, however, it is now possible to do much of the financial and tax planning right at your desk.

Tax Planning

Several firms offer software for tax planning. For stock brokers, one of the most suitable packages is Tax Mini-Miser™ from Sunrise Software. It allows the stockbroker to enter a client's estimated income and deductions to calculate the client's present tax liability.

At the same time, it allows the stockbroker to work with five possible alternatives or investments—such as IRAs, municipal bonds, utilities, and tax shelters—to determine the effects of different financial decisions. It also enables the broker to provide immediate feedback on the tax consequences of each alternative.

Another feature allows the broker to project a client's tax situation six years into the future to see the financial effects caused by changes in income,

deductions, and investments. In a few minutes a stockbroker can now accomplish tax planning that would have taken days without a personal business computer.

Financial Planning

Financial planning is also possible now with software from several firms. Money Tree uses VisiCalc® templates for individual financial planning. One major brokerage firm, Drexel Burnham Lambert, has developed a software package for individual financial planning. Several others are being prepared by software firms for distribution in the near future.

With the Drexel financial planning program, a client provides the stockbroker with information on his or her present financial condition and future needs. The stockbroker can then provide a financial road map to meet those needs. If it does not seem feasible, given the client's assumptions, the broker and client can work with various alternatives to come up with a workable solution.

Options

Another new use of the personal business computer has been to help clients understand more complex investment strategies. One example is the use of an option writing program by many brokers at Dean Witter Reynolds. With detailed illustrations of an option strategy, including what happens if the stock goes up, goes down, or remains unchanged, the client—and sometimes even the broker—has a better understanding of the risks and rewards of writing a covered call.

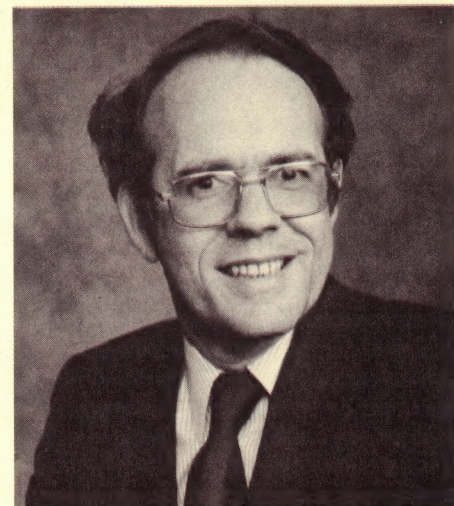
This has opened up a whole new area of investments for many brokers and clients. And many other option-writing strategies will be available in the near future.

Within a few years a checkup of your financial health should be as easy as a checkup of your physical health. The personal business computer has provided another high-powered service to clients that was available only to wealthy clients at considerable cost just a few years ago.

One of the greatest challenges facing us today is how to best employ the personal business computer. Sure it can make many of our daily tasks a little easier, and speed up some others, but let us not lose sight of its potential. It is a new tool, and should provide a new way of looking at how we do many things.

Market Microscope and Market Analyzer are trademarks of Dow Jones & Company, Inc.

Tax Mini-Miser is a trademark of Sunrise Software.



About the author:

James H. Blake is a vice president for Drexel Burnham Lambert (DBL). Based in San Francisco, he is manager of computer resource centers and provides personal business computer support for DBL's account executives. Last year he founded the Association of Personal Computer Support Managers for NYSE/NASD member firms. Prior to joining DBL, Jim was with Dean Witter Reynolds for 12 years. ■■■

MONEY's Micros

By Walter M. Korinke

Four years ago, I plunged headlong into the world of Apple personal computers. This was due partly to curiosity, partly to my hope that the new microelectronic wonders would help reduce my ever-increasing workload, and partly to my need (as a survival tactic) to keep in step with the increasingly brilliant MBA army.

After deciding on a full-fledged Apple II system, my then 12-year-old son and I set forth to see if this mysterious machine could help in the office. Before long, our roles as father/teacher-son/student were reversed as the open mind of the young adapted quickly to the requirements of programming.

With his programming knowledge of Basic, Pascal, and assembly language, and my knowledge of real estate requirements, we began developing program after program to satisfy the needs of the real estate investment department of Mutual of New York (MONEY).

As we began to provide financial reports, analyses, and graphs to the New York office, it developed a dependence on our capabilities. Calls would come from the financial capital of the East: "We are considering ... What does the computer suggest?"

MONY now has a microcomputer section in its EDP department and, we are pleased to say, our real estate division will be purchasing personal computers for our department this year. Meanwhile, my son, now 16, has been programming and consulting for many major real estate companies, and continues to amaze his elders with the "new computer breed."

A year ago, Mutual of New York upgraded to an Apple III, and we're ecstatic about its increased capabilities. How are we using our Apple III at Mutual of New York today?

Special Programs For Real Estate Functions

We have developed programs to speed up our many analysis functions for the various types of real estate investments with which we are involved. This has reduced our analysis time to hours instead of days, thus giving us a competitive edge in actually getting a deal. These programs provide such functions as the following:

- cash flow analysis
- internal rate of return
- amortization schedule
- rate buy-down calculations
- wrap-around calculations
- depreciation schedules

Financial Modeling

Without a doubt, VisiCalc® gets more use than any other program (except for word processing) in our library. It replaces the need for many specialized programs, and permits us to develop all kinds of financial models without the need for a programmer. Everyone in our office is "up to speed" in its use as it is critical in our day-to-day applications.

Generally, you can learn to use VisiCalc over a weekend. With continued use, your speed in creating models via its repetitive features increases exponentially. For constant usage, you can create basic models that can be easily modified to fit the case at hand.

Once you have mastered the basic commands of VisiCalc you are ready to learn the increased capabilities of Advanced VisiCalc. These include automatically inserting commas in your figures (crucial to cash flow pages), creating different column

widths, and automatically determining Internal Rate of Return (IRR). (Regular VisiCalc is limited to Net Present Value.)

Database Management

We use several database management programs with the Apple II. Our two major programs for this purpose with the Apple III are PFS™ and Quick File™, depending on the types of reports and use we are planning.

Generally we find PFS the most useful and are planning the addition of PFS:REPORT™ to give us more flexibility in the printed output.

Our typical investment volume in each of our five regional offices can run to \$200 million per annum. To accomplish this, we review close to \$2 billion in potential investments per year. It is physically impossible to keep more than a few months' inquiries in file, so every day we store on a PFS sleeve all the pertinent data from these inquiries. This way we can search under any manner of description for years of data retained on two or three disks.

We also apply our data-management systems to many other tasks such as tracking our closings, production, mail lists, and comparables. The result: reams of available data are

readily accessible. This enhances our ability to make fast and accurate decisions, and keeps us up-to-date on our activity and cash-flow management.

Graphics

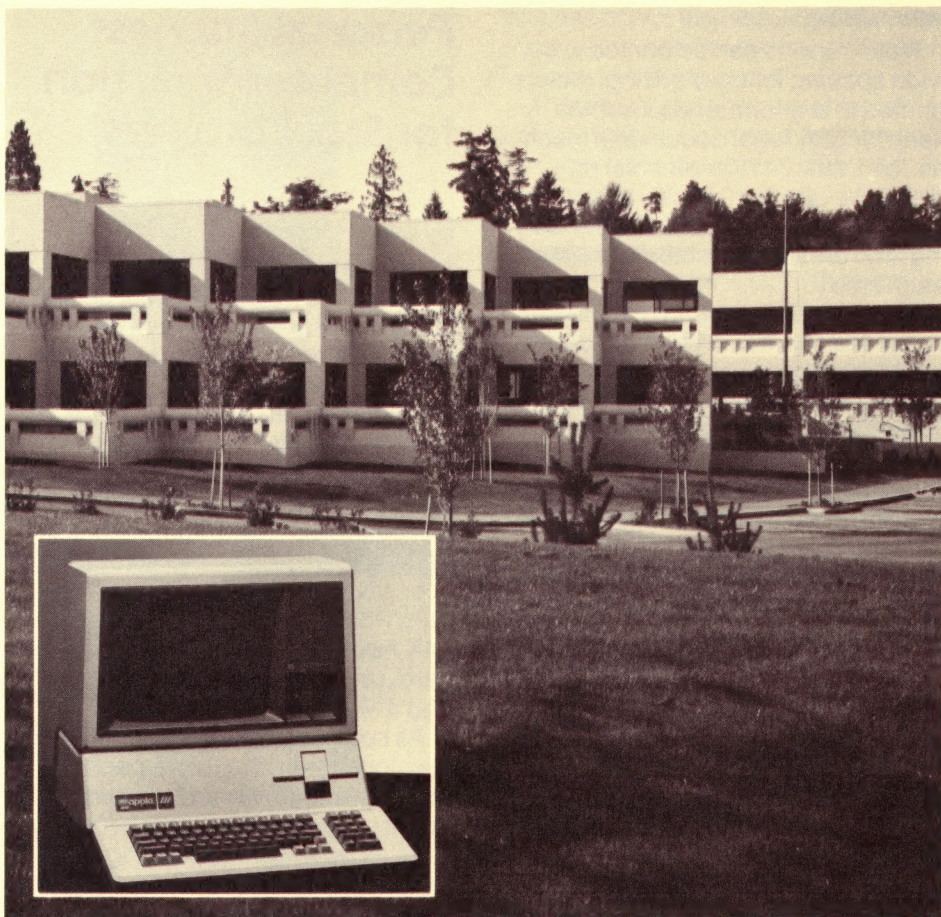
Until we started using graphics applications, we used to present "truckloads" of data, which required careful analysis to determine the differentials. One particularly dramatic use of graphics occurred in our tracking of monthly investment disbursements ranging from \$2 million to \$100 million.

In reviewing the numbers spread out over a year or more, we could not immediately recognize the changing requirements. But after applying graphics to this function, we could see in a moment the new requirements, and we could plan accordingly.

Word Processing

How we ever completed major reports, letters, and legal documents before the advent of Apple Writer III remains a mystery to me. Virtually every written item is now rapidly accomplished on an Apple computer. It is easy to make corrections, shift sentences and paragraphs, and insert general data recalled from disk.

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Major reports can be printed with wide spacing for easy editing, then printed in any format required. We keep lengthy legal documents (such as Joint Venture Agreements) on disks. We can then quickly adapt them to the case in hand without losing time creating an entire document each time.

We also use Apple Writer to develop a newsletter to keep our clients advised of the ever-changing financial climate. And with Apple Writer we easily enhance the newsletter with little novelties, such as a crossword puzzle (quickly generated on the Apple), relevant to our industry. We also use it to print the mailing labels automatically via PFS. The whole process from creation to mailing is accomplished with minimum effort and time.

We can't wait to use Apple Speller///, which will help compensate for the weakness most of us have in spelling. (The dictaphone weakened my spelling ability years ago).

With the ability to run Apple // applications in emulation on the Apple ///, and the ability to convert data from Apple Writer // or VisiCalc // into VisiCalc /// data for larger model use, we observe our employees acquiring their own Apple //s and Apple ///s for work at home as well.

With the major growth in full financial-house services in the life insurance industry, there is no question that we will continue to place high demands on Apple personal computers in the future.

PFS is a trademark of Software Publishing Corp.



About the author:

Walter M. Korinke is Regional Vice President for Real Estate Investments, Mutual Life Insurance Company of New York. He is responsible for all real estate investment activities (including financing, joint ventures, and acquisitions) for MONEY for the western one-fifth of the United States.

Personal Business Computer Selection for Stockbrokers

By Lynn Hackethal

If you're a stockbroker, you may find that your greatest difficulty in getting started with a personal business computer is selecting the hardware and software that best meet your individual requirements and methods of doing business.

The Apple //e is not only a very good personal business computer, it also has the greatest number of reliable programs available to support your sales efforts. The basic configuration for a stockbroker would be a 64K Apple //e, an 80-column text card, one disk drive with controller, and a Monitor // or ///.

As soon as possible you should add a second disk drive to this package because two drives are required for much of the stockbroker software, such as portfolio and charting programs. The second disk drive will also save considerable time and effort in such operations as making backup copies of programs.

A printer may cost as much as, or more than, the basic computer. You'll have to decide between an expensive letter-quality printer, or a less expensive but faster dot matrix printer. Unless you or your family have a specific need which requires a letter-quality printer, you would be wise to consider a dot matrix printer.

The software (and additional hardware) you purchase will depend upon your individual needs. The following software programs are presented in terms of their functions and their ability to meet those needs.

Tax Mini-Miser has generated additional fee income for stockbrokers through increased tax shelter sales. This program alone can pay for a personal business computer for many stockbrokers within the first three months of use.

You may enter a client's present tax situation and then have up to five alternatives to illustrate the effects of various investment strategies on both federal and state tax liability. Within minutes you can estimate the direct effect—on both federal and state taxes—of taking various capital gains or losses during the year, or investing in a tax shelter.

PEAR (Portfolio Evaluation and Reporting) is another program which may help to promote your professional image and increase your sales. With it you can provide clients with excellent, up-to-date portfolio printouts of all security positions. It also provides you with a current cross-reference of all clients holding specific securities. In addition, it will provide an income summary, mailing labels, and year-end tax information for capital gains/losses.

PEAR is widely used among stockbrokers today. It's one of the easiest programs to learn to use proficiently, and the user support is excellent. One stockbroker even got assistance on Labor Day last year!

PEAR is quite helpful as a prospecting tool for pension and profit-sharing accounts and small institutions. It is also particularly useful to investment advisors who require portfolio printouts of accounts involving securities held outside their firms. In addition, it can provide monthly reports and portfolio reports at any time. Security prices can be updated via modems from the Dow Jones Quotes™ service, or from several other sources.

Market Analyzer is an excellent charting and technical analysis program for stockbrokers and students of the stock market. Even if you are not a market technician, the charts may help your timing of purchases and sales. Market Analyzer will also let you provide your clients with current stock/option/commodity charts.

Stock price/volume information can be updated via modem directly from the Dow Jones Quotes service, or you may enter the price and volume information from your quote machine. One stockbroker enters the information for 104 securities daily in about 20 minutes. You have the ability to work with moving averages, trend lines, and relative strength charting. The cost/benefit ratio is excellent for this program.

VisiCalc®, the "electronic spreadsheet" for personal business computers, has been the most popular accounting program for years. Stockbrokers use it to provide Schedule-D tax information at the end of the year, miniportfolio programs for clients, financial analyses, and investment management comparisons. And a few use it to maintain personal budgets. VisiCalc can be used for any financial analysis requiring paper, pencil, and spreadsheet. And it can be combined with VisiPlot™ and/or VisiTrend™ to

provide graphic presentations which will substantially enhance your sales efforts.

Quick File™ and **PFS™** are two programs that can greatly simplify your personal filing system. (If you are a very disorganized stockbroker, but successful in your method of operation, maybe you should not try to change your style! If you would like to become better organized, however, or don't have the assistance you need, then Quick File and/or PFS may be the solution.)

Quick File is a free-form filing system that you design around the way you currently keep your files. You can use it to keep track of client information, prospecting information, names and addresses—even your sales presentations on specific investment products. You can also use Quick File to translate your files into report form, to sort names and addresses, and to print your mailing labels.

Apple Writer, one of the best word processing programs available for the Apple, also lets you merge information from Quick File and VisiCalc into Apple Writer documents and letters. Word processing is usually a very low priority for stockbrokers when they begin to use a personal business computer, but it becomes much more important as a broker realizes how simple it is to use.

If you are inclined to begin writing some of your own programs, you will find Applesoft BASIC (the Apple //e's built-in language) very easy to learn. Most other languages, such as Pascal, COBOL, and FORTRAN, are also available on the Apple.

The Apple //e is by far the most widely used personal business computer for stockbrokers. Thus, you can expect that most of the new software you'll need will be written for the Apple. This personal business computer is a powerful selling tool to help you sell yourself, as well as specific products, to your clients and prospects.



About the author:

Lynn Hackethal is the president of Exec Ed, Inc. Her firm specializes in training brokers how to increase their gross using a personal computer. She consults with brokers individually, conducts workshops on how to use a personal computer, and provides follow-up support.

The Bank of Louisville Branches Out with Apple

By Robert Potts

In the summer of 1978, the Bank of Louisville was using card programmable calculators to compute the payments on installment loans. About that time a vendor for a major minicomputer manufacturer presented management with a proposal to place its minicomputers in the bank's branches. The minis would have been programmed to calculate loans and print the accompanying papers. Programming for additional tasks was not clear, however, and communications between the minis was out of the question.

The bank management turned to a task force headed by Senior Vice President M. Robert McElwain. After much research, the decision was made to purchase an Apple // because of its flexibility and expandability. This was no easy decision in 1978. The Apple // was just then beginning to gain acceptance and the Disk II was a promise for the future.

By the first quarter of 1979, the bank had a prototype system in one of its branches. Since then the number of systems has constantly expanded.

Now all 100-odd branches have two Apple systems each. The first system is equipped with a letter quality printer for form printing and a modem for communications. The second system is equipped with a small thermal printer for loan calculations when the first system is busy. With over 200 Apples now installed, the Bank of Louis-

ville has one of the most sophisticated microcomputer-based loan processing systems in the world.

All loan applications are entered into the first Apple in each branch and transmitted to the central office for processing. At the main office a group of dedicated Apples receive the applications, stamp them with time and date, print them, and store them on a hard disk. Periodically these applications are downloaded to tape and entered into a control system on the bank's IBM 4341. This results in greater control over the ever-increasing number of applications received by the bank.

Once a loan has been approved, the branch Apple is used to calculate all figures necessary to close the loan and print the appropriate loan forms. The Apple is programmed in accordance with the laws and regulations governing such loans. Human errors have been almost totally eliminated from the system.



In its credit card department, the bank is using its Apple computers with a commercially available word processor/form letter package. This department routinely mails between 70 and 150 letters each day. All letters are personalized to the individual customer and printed on a letter quality printer.

Using dedicated Apples and a hard disk drive, the bank also maintains its own Apple bulletin board system. At any time of the day a branch manager merely has to press one key to gain access to the bulletin board and receive up-to-the-minute data on current rates, meeting dates, and other information. This has significantly increased communication throughout our branch organization.

The Apple personal computer is one of the main cogs in the bank's current expansion effort. Loan offices, located in various cities around the state, are being opened at the rate of one per month. These offices, unlike

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Bank of Louisville (continued)

conventional branch banks, only accept loan applications or close the approved loans. So with an Apple calculating and printing the necessary forms, the offices can be opened and staffed with a minimum of effort and personnel.

Because virtually the entire bank is affected by personal computers, we have developed a comprehensive training program. As soon as it is decided that a department needs Apples, we develop a specific training program for that department. Its key people are involved up front by training them first and then working with them to develop specific programs to meet their department's needs. Whenever possible, commercially available programs are used to reduce programming time.

Once these solutions are developed, the entire department begins a three-day training program that involves not only learning the programs, but also taking apart and reassembling Apple systems and peripherals. This helps to demystify the machines, and allows employees to find the answers to questions that arise in daily use.

Some of the Apples have begun to pay their own way. The bank is leasing Apples to other banks within Kentucky. Offering on-site maintenance, educational classes, and complete consultation services, more and more banks are signing up with the "Pro."

The micro department, established under the administration of myself and Vice President Wayne Carter, is charged with maintenance and enhancement of new systems. With a staff of nine, the micro department looks forward to providing the bank of Louisville with the systems, programming, and educational expertise necessary for the future.



About the author:

Robert W. Potts has been with the Bank of Louisville since 1971. As a vice president in charge of the Microcomputer Department, he is responsible for all programming and technical services.

Commercial Data Bases At Your Service

By Christine L. Thompson

Probably no industry in America has a greater need for the quality of information provided by commercial data-bases than the investment and finance community. The problem in choosing a commercial database lies in determining which one most completely meets your immediate and long-range needs.

First, decide exactly what you want from a service, and then contact the various commercial database companies to find out if they can provide the information you need. At the same time, find out what your monthly cost will be. Also ask whether step-by-step instructions come with the start-up package, and whether signing up for the service entitles you to any free usage.

The table below provides some of this information for you. There are also books available on databases. One you might try is *Data Bases for Business*, published by the Chilton Book Company.

Once you've chosen a service, you'll keep costs down if you use it at night when it's less expensive. During the day you can get all the information you need from economical on-line services such as Quotron.



About the author:

Christine L. Thompson works for Quest Computers in San Francisco. Her primary interests are working with computers and working with brokers. Ms. Thompson says she hopes to see the brokerage industry move more rapidly into the all-important age of microcomputer technology and the distribution of instant information.

NAME OF SERVICE OR COMPANY	SOURCE OF NEWS
BRIDGE DATA COMPANY 10050 Manchester Rd. St. Louis, MO 63122 (800) 325-3986	Dow Jones News/Retrieval; Bridge News Service
COMPUSERVE™ 5000 Arlington Ctr. Columbus, OH 43220 (800) 848-8990	Associated Press; Washington Post; Others
DATA RESOURCES INC. 29 Hartwell Ave. Lexington, MA 02173 (617) 861-0165	DRI has its own industry economic "Notes"
DIALOG® INFORMATION SERVICES 3460 Hillview Ave. Palo Alto, CA 94304 (800) 227-1960	Various sources
DOW JONES NEWS/RETRIEVAL® P.O. Box 300 Princeton, NJ 08540 (800) 257-5114	Barrons; Forbes; Wall Street Journal
INTERACTIVE DATA CORP. 486 Totten Pond Rd. Waltham, MA 02154 (617) 895-4269	IDC has its own industry news & reporting service
REMOTE COMPUTING CORP 1076 E. Meadow Circle Palo Alto, CA 94303 (415) 494-6111	Mortgage Index
THE SOURCE™ 1616 Anderson Rd. McLean, VA 22102 (703) 734-7500	UPI News
WARNER COMPUTER SYSTEMS 605 Third Ave. New York, NY 10158 (212) 986-1919	None

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DIALOG is a trademark of DIALOG Information Services, Inc.

UPDATING INFO.	NO. OF SECURITIES	COMMOD. PRICING	OPTIONS PRICING	GRAPHIC DISPLAYS	PORTFOLIO MGMT.	START-UP COSTS	MAIN SERVICES OFFERED
News: real time Securities: real time	25,000	Real time	Real time	Yes	Yes	No start-up fee; hourly rates: \$12-\$60	Designed for brokers, investment advisors, options traders. Charting includes: price volume-point and figure-probability charts.
News: ongoing Securities: end of day	50,000	Prices & News Commodity News Service	Yes	Micro-Quote; Vid/Plot; Tele-Don	Yes (both on-line & VisiCalc download)	Hourly rates: \$5-\$40 (5 hours free usage)	Oriented toward evening usage by business people. Electronic mail; CompuStat; ValueLine; home-shopping and home-banking magazines; games and entertainment.
"Notes": on occasional basis Securities: end of day	50,000	TBA on VisiLink™ Data Kits for micros	Yes	TBA	Yes (AMPAS)	No start-up fee: To use DataKits, VisiLink required (\$250)	DRI designs client-specific software in commodities, options and bond swapping. Info. services, NIKKEI, CompuStat, ValueLine, US/Int'l indicators. Industry specialties: steel services, energy, pulp & paper, forestry.
News: end of day Securities: No	30,000	No	No	No	No	\$35 fee \$24 per hour	Descriptive indexes of articles, with free text search (books, reports, and newspapers).
News: real time Securities: 15-30 min. delay	30,000	Yes	Yes	Graphs can be drawn with Market Analyzer	Through software for management of portfolios	\$50 fee .10-\$1.20 per hour	News: business and economic; media; general, historical quotes (qtrly since '78) disclosure; On-Line; free text search.
Industry news and reporting service: on occasional basis. Securities: end of day	2 million (includes muni. and corp. bond pricing)	Yes	Yes	Approx. 75 different graphic devices	Yes (both on-line and downloading of reports, balance sheets, etc.)	No start-up fees; hourly rate varies	Investment and economic research, dividend updating, portfolio analysis, earnings estimates, money market prices, CompuStat, EXTEL, ValueLine, Call Sinking Fund, international interest rates.
Mortgage index: on occasional basis Securities: twice a day	50,000	Yes	Yes	Yes	Yes	\$75 per month minimum	Supplier of most research material for historical evaluation
News: real time Securities: throughout the day	20,000	Yes	Yes	No	On-line only	\$100 fee \$7.75-\$20.75 per hour	News and research tool, airline schedules, games, text search, media, general.
News: no Securities: end of day	30,000	No	Yes	Yes (software provided by vendor)	Only on software packages	No start-up fee; hourly rate varies	Provides many software services and access to a variety of other data bases.

THE SOURCE is a service mark of Source TeleComputing Corp.
VisiLink is a trademark of VisiCorp.

Tax Considerations and the Professional Computer

By John S. Buckley

If you're considering the purchase of a personal computer today, you shouldn't overlook the available tax benefits. Ask a tax advisor these questions:

- How should the cost of the hardware be deducted?
- How should the cost of the software be deducted?
- What tax credits are available?

First, though, let's examine each question.

How Should the Cost of Hardware Be Deducted?

Before 1981, the cost of equipment was depreciated over its useful life or over a guideline life known as the Asset Depreciation Range (ADR). Now, however, under the Accelerated Cost Recovery System (ACRS), enacted as part of the Economic Recovery Act (ERTA) of 1981, you can deduct depreciation of your computer hardware over a predetermined recovery period that is generally shorter than the equipment's useful life.

Most computers fall into a five-year recovery class, but equipment that is needed for qualified "research activities" will fall into a three-year class.

Another act, the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), made important changes affecting ACRS. Under ERTA, ACRS depreciation schedules for five-year recovery property were computed to approximate the depreciation deductions you would receive if you used a 150-percent declining-balance depreciation method, with a switch to straight-line depreciation after two years. For property acquired in 1985 and 1986, ACRS schedules for five-year property were to be adjusted to approximate 175-percent and 200-percent declining-balance depreciation methods, respectively.

The following table illustrates how the cost of a \$10,000 computer would

have been depreciated under ERTA if acquired in the following years:

Year	1981-1984	1984	After 1985
1	\$1,500	\$1,800	\$2,000
2	2,200	3,300	3,200
3	2,100	2,500	2,400
4	2,100	1,600	1,600
5	2,100	800	800
	\$10,000	\$10,000	\$10,000

TEFRA repealed the cost recovery changes that were to take effect in 1985 and 1986, but the method used for 1981 through 1984 will stay in effect after 1984. This is a significant change for anyone who planned to delay the purchase of a new computer to take advantage of more favorable write-offs in 1985 and 1986.

In lieu of depreciating your new computer, ERTA gives you the option of deducting its cost immediately, but only up to the following limits (again, based on a \$10,000 computer) per applicable tax years:

Year	Limitation
1983	\$5,000
1984	\$7,500
1985	\$7,500
After 1985	\$10,000

There is no absolute rule that will tell you whether to deduct the cost of your computer today or to depreciate its cost under ACRS. An important point to consider, however, is that an investment tax credit is available only if you use ACRS.

Another important point to consider is your current tax situation. If you have substantial tax credit carry-overs from past years that will absorb your current tax liability, you'll receive no current tax benefit by generating more credits. On the other hand, a current deduction may be preferable if it reduces your taxable income or generates a loss that can be carried back to reduce prior years' taxable income.

How Should the Cost of Software Be Deducted?

There are several ways to treat software costs for tax purposes. The cost of software developed by a user can be deducted currently or amortized over five years, at the taxpayer's election. Purchased software must be written off under ACRS rules; leased software must be deducted as rental payments.

An important point to remember is that rented software—or the cost of developing software, if currently deducted—may qualify for credit if the software is related to qualified research (R&D). ACRS deductions aren't eligible for this credit, however.

What Tax Credits Are Available?

If you purchase a business computer, two tax credits are potentially available. One is the investment tax credit (ITC); the other is an R&D credit for increasing qualified research and experimental expenditures.

ITC is tied to the ACRS category of property acquired. Five-year property is eligible for a 10 percent credit, three-year property for a 6 percent credit. TEFRA created a provision that requires a purchaser of equipment to reduce the depreciable basis of his or her property in an amount equal to one-half of the ITC taken.

For example, if you spent \$10,000 for a new computer that was five-year property, you would receive a 10 percent credit, or \$1,000, but the basis of your property eligible for depreciation under ACRS would be only \$9,500 (\$10,000 cost less \$500; \$500 is one-half of the \$1,000 credit). The reduction in basis of \$500 can never be taken as a deduction.

Instead of taking the ITC and realizing a reduction in the depreciable basis for your computer, you may elect to reduce your ITC by two percentage points. Under this election, a 10 per-

cent credit would be reduced to 8 percent. If you purchased three-year property, your 6 percent credit would be reduced to 4 percent. Again, deciding whether this is an attractive option will depend on your tax situation.

In addition to ITC, you may be eligible for a credit for qualified research expenditures. ERTA instituted a 25 percent credit for annual increases in certain research expenses over average expenses incurred in a base period. Expenses that qualify are certain research-related wages, supplies, rentals, and outside contract research.

To be eligible, expenditures must be for research in the United States, and must be performed in a field of laboratory science such as physics, engineering, or technology. The credit would apply to such items as product development costs, but not to costs associated with marketing. Some computer-related costs such as wages, supplies, computer rentals, and certain software expenditures may qualify for this credit.

We hope that you'll keep these important tax questions in mind when you shop for your personal computer.



About the author:

John S. Buckley is the Partner-in-Charge, Tax, with Ernst & Whinney, Boston.

Paramis Improves Sales Behind the Counter



By Bob Blackman

Versatile Point-of-Sale (POS) software for Apple computers is now available from Paramis Corporation, microcomputer business-software developers and retail-industry consultants. Used successfully in both single and chain retail business, the POS system controls pricing at the cash register and records sales transactions as they occur.

These include such complex transactions as layaways, returns, gift certificates, and special discounts or markdowns. In a single transaction, up to four types of tender are allowed, even on layaway or charge-account payments. An additional feature allows the sales person to cancel any item at any point without voiding an entire transaction. POS also offers price look-up and item-description translations.

In addition, POS performs electronic cash register functions, features a real-time clock, and has a built-in, secured manager function. Key management reports provide timely information on the following:

- daily sales analysis by store, divi-

sion, department, class, and SKU

- hourly sales analysis by unit and volume
- commissions by salesperson
- employee hours

Paramis claims that cashiers and sales people can be trained to operate complex transactions in approximately 20 minutes. An operator's self-instruction manual and a manager's guide are included in the POS package. On-screen help is also available every step of the way.

The system runs on the Apple // Plus (with 16K RAM card) and Apple // e, with two disk drives and/or Corvus Omninet, 10-key pad, and display monitor. The POS package includes the software, receipt printer, journal printer, cash drawer, and POSicard (interface card) for \$2190. A complete system, including hardware, is priced under \$5000.

For further information, contact Bob Blackman, Paramis Corporation, 1011 Brioso Drive, Suite 101, Costa Mesa, California 92627; (714) 646-1633

Omninet is a trademark of Corvus Systems, Inc.

Long and Short Term Communications

LisaTerminal, Lisa's new, integrated data communications application, gives you the best of both worlds: access to the information you need from other computers, and the convenience and cost-effectiveness of working with the information off-line on Lisa. As with other Lisa applications, you can learn to use LisaTerminal in less than 30 minutes.

Using a plug-in modem, LisaTerminal software allows you to gain easy access to remote mainframe computers, as well as to remote public information services such as CompuServe™, The Source (SM), and Dow Jones News/Retrieval Service®. In addition, LisaTerminal provides access to corporate production database products such as IBM's

IMS/DB/DC™, Cullinet's IDMS, or a variety of other database management systems.

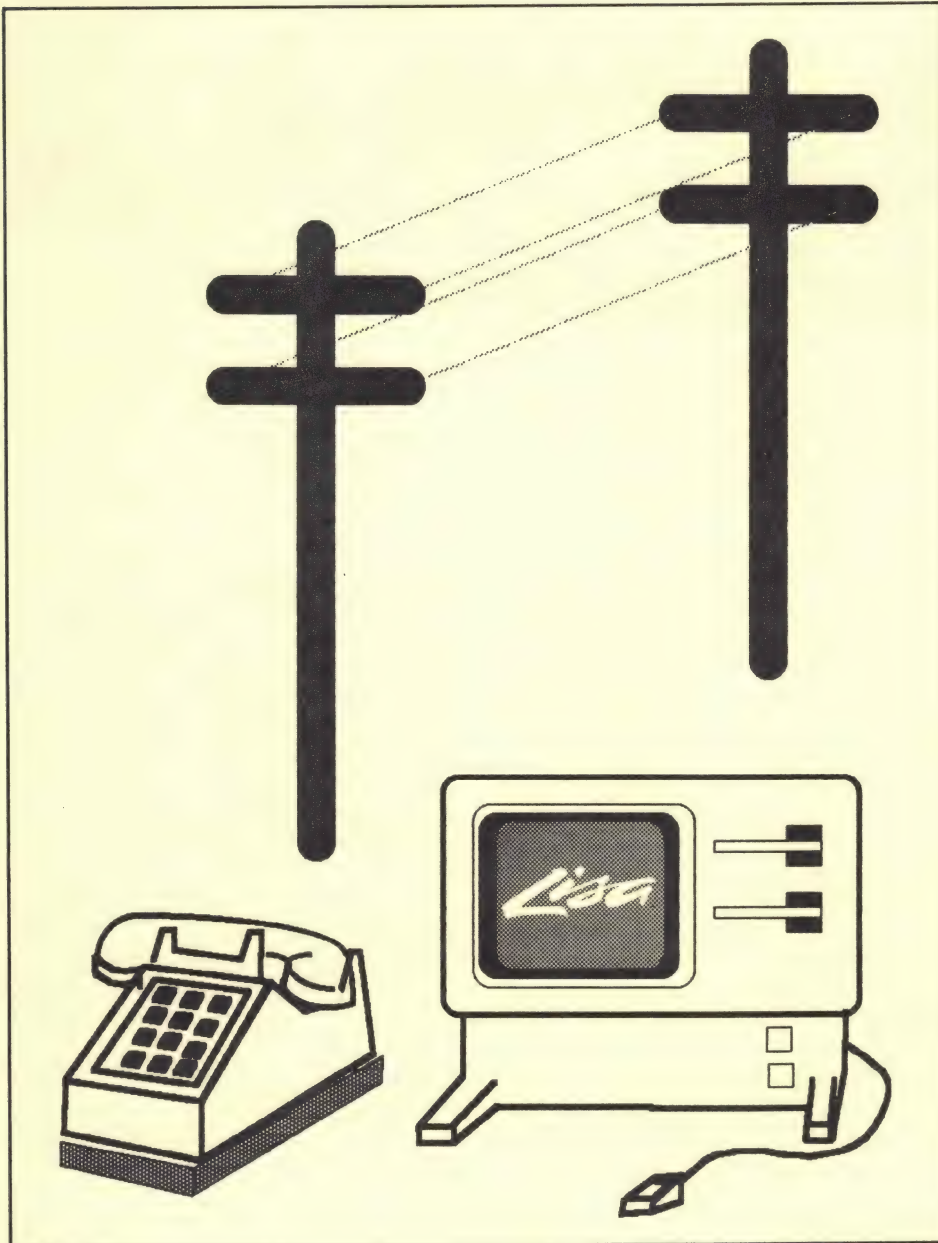
LisaTerminal also allows Lisa to access central corporate mainframes and minicomputers by emulating TTY, VT52,™ and VT100™ terminals. LisaTerminal supports full- and half-duplex asynchronous protocols and will transmit and receive data at speeds of 50 to 9600 baud.

Connection to the host computer is easily established. LisaTerminal allows you to specify a number to be called, then makes the connection automatically when the auto-dial feature is selected. In addition, LisaTerminal allows you to store two telephone numbers for instant recall by the auto-dial feature.

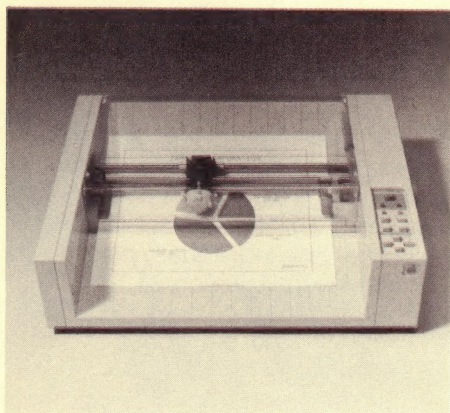
LisaTerminal also provides communication with any IBM or IBM-compatible system that supports the 3270 bi-synchronous protocols. The Lisa is attached by direct cable or by remote communications lines to the Apple Cluster Controller.

A great advantage of LisaTerminal is its integration with other Lisa applications. Using the "cut and paste" features of Lisa, information from a host computer can be directly transferred into LisaWrite for inclusion in reports. Information generated locally on Lisa with LisaWrite or LisaCalc (numbers only, no formulas) can then be transferred back to the mainframe and stored on disk for future use.

Setting up the terminal options on LisaTerminal is easy because there are no commands to remember; all commands are clearly and concisely displayed on Lisa's menu. The mouse is used to select terminal setup options from a handy checklist on the menu bar, and once the setup configuration is defined, it is automatically stored for future use.



No Plodding with the Apple Plotter



By Brad Crystal

You're a sales manager who compares monthly revenues with quotas, and you need to report your findings back to the field and to upper management. Using your Apple personal computer and a business graphics software program, you've stored some revealing graphs on disk. But you still need a way to distribute full-color paper printouts.

What you're looking for is the Apple Color Plotter, a new device from Apple that will produce both paper printouts and acetate transparencies for overheads. With it, you'll be able to present colorful pie charts, bar charts, drawings, line graphs, and scientific X-Y plotting of data quickly, easily, and cost effectively.

Spreadsheet programs such as VisiCalc® allow you to monitor your company's key financial information and update it when necessary. Graphics programs allow you to take that spreadsheet information and translate it into easy-to-understand graphs, pie charts, and scatter diagrams on your screen.

But what happens when you need to present your numerical information to a large group or to inquisitive managers throughout the company? If you want to display your graphs at company meetings and in other professional settings, you will need a way to convert the information on your screen into hard copy paper printouts or overhead transparencies. That's where the Apple Color Plotter comes in.

It is particularly suited to business needs: financial planning, general outlines for presentations, problem identification and analysis, and periodic reporting. What's more, the Ap-

ple Color Plotter is fully compatible with Apple Business Graphics and most other graphics software programs.

Beyond business, the Apple Color Plotter can help you display complicated scientific and engineering data in a concise manner. It can even serve you as a training or teaching aid.

No matter what the application, your results will be displayed in vivid color. This means your charts and graphs will get the attention they deserve. And the data you display will be easy to comprehend.

The plotter features a variable-width plotting bed, so you can create paper printouts in several different presentation sizes—up to 11 by 17 inches.

If you're concerned about space limitations at your desk, you'll be pleased to know that the Apple Color Plotter is compact and light. It weighs just a little more than 13 pounds and takes up less than 16 square inches of your desktop.

And if you're concerned about speed, you'll be pleased to know that the Apple Color Plotter is no plodder. Its pens can attain a maximum velocity of 14 centimeters per second.

Why Businesses Need Plotters

If you have any doubts about the effectiveness of graphs when used in presentations, consider two recent studies. One, by the Wharton School, showed that the use of graphics not only made arguments 50 percent more persuasive, but also cut decision time by 30 percent. Another study, done by Hewlett-Packard, indicated that a chart is 114,000 times easier to comprehend than the same information shown as words and numbers.

Why the Apple Plotter?

If you would like your Apple II or Apple III personal computer to help you present numbers and data as effectively as possible, the recently released Apple Color Plotter may be for you. What better way to display your company's financial and investment information than in the eight vivid pen colors provided with the plotter?

Apple also offers a host of plotter supplies to meet the exacting needs of today's business professional. ■■■

Apples and PEARS
(continued from page 1)

In the late 1960s, the volume came as heavily as Noah's rain, and many firms were not prepared. The New York Stock Exchange went on a four-day trading week in order to catch up with the deluge. During this period, several major stock exchange firms lost control of their operational departments and were unable to function properly. The exchange did the only thing possible: arrange takeovers or mergers by those firms that were in control.

It was then that Thomson came to the fore as one of the companies that the Exchange called upon to help out—and Thomson did, more than once. As a result, Thomson grew to major status and today has 130 offices and 1700 account executives throughout the United States and Europe.

In 1978, when the personal computer started to surface, many people with foresight saw this as something other than a hobbyist endeavor. Because I was the first person in the office to use a calculator, everyone assumed I would also be the pioneer in personal computers. They were right!

My choice was not difficult. Apple offered a computer that was easy to understand and easy to operate. Everyday you could read about new products and software being developed for Apple by people all over the country. In addition, local Apple clubs were being formed to help novice computer owners exchange ideas and learn to get the utmost from their new purchases. It was evident that the Personal Computer Wave was upon us.

The first top-seller software was VisiCalc®, the electronic spreadsheet. This program proved that the Apple was not only a personal computer for the everyday person, but one that had a place in the business world as well. Immediately, Apple personal computers were in banks and offices, though they were only used as superior number crunchers.

The success of VisiCalc inspired many brilliant people to develop software for every purpose to sell to the new computing generation. Today, the large volume of new programs covering all subjects for most professions makes it very easy for me to answer people who ask, "What can I do with a computer?." My reply: "Anything you want it to do!"

apple resources

By Catherine Nunes

■ **Trade*Plus** recently announced a software and service package for the Apple. It provides stock and option quotations as well as order-taking and record-keeping features. Individual investors can now take advantage of last-sale prices and trade-sale securities on their Apples without having to contact their brokers directly.

Orders are transmitted directly to the brokers' wire operators, who wire them to their trading agents on the Exchange floor. Confirmations of trades are immediately visible on screen; written confirmations are mailed as well.

The program also provides maintenance of personal financial records, including an investment portfolio, outstanding orders, year-to-date tax records, and realized and unrealized gains and losses. Keogh and IRA accounts can also be added. Financial records are always current and available, and quotations are "real time" with no line delays.

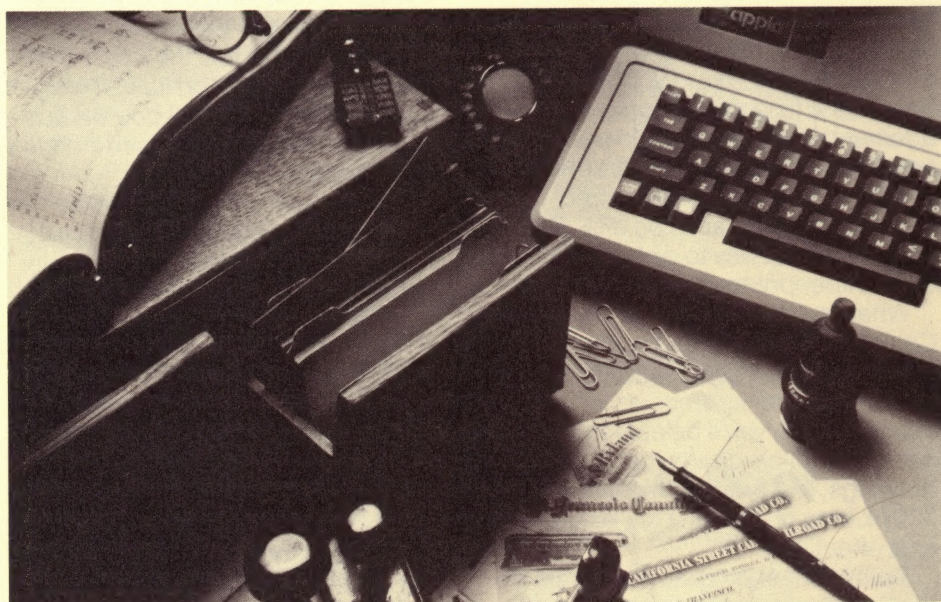
For more details, contact Trade*Plus, 460 California Avenue, Palo Alto, CA 94306; (800)952-9900; in California, (800)972-9900.

■ **Bank Earnings, International (BEI)** provides a variety of programs designed to increase service and earnings in virtually every area of banking. Its programs include *Teller Service, Proof Management, Branch Performance, Commercial Analysis System, Platform Service, Trust Optimal Pricing System, TransCheck Optimizer*, and *Electronic Library Video Information Service*. For more information on BEI, contact Rita Callahan at 3420 Norman Berry Drive, Suite 623, Atlanta, GA 30354; (404)768-5689.

■ **The Incredible Jack** is a package that features four integrated applications: personal filer (database), calc package (electronic spreadsheet), word processing, and mail list management. All of the applications are executed by using a simple set of integrated commands. Other information can be obtained by contacting Business Solutions Inc., 60 East Main

Street, Kings Park, NY 11754; (516) 269-1120.

■ **Comshare, Inc.** offers a variety of programs for trust departments. These programs include four packages under the name *Microshare*: 1.) Will Retention/New Business System, 2.) Lump Sum System, 3.) ESOP (Employee Stock Ownership Plans) System, and 4.) Profit Sharing System.



Microtrust is an easy-to-use trust accounting system developed for the Apple III. It provides administrative/customer-reporting and investment reviews. It also maintains accounting records and aids in tax preparation. For more information contact Marcia Hoover, 1700 Market Street, Philadelphia, PA 19103; (215)564-3404.

■ **Apple's Monitor II** is now on the market. A custom-designed video display device, the *Monitor II* fits neatly on top of computers in the Apple II family. Advanced technology allows this green-phosphor monitor to produce highly readable characters and high-resolution graphics. The high-contrast, nonglare 12-inch tilt screen provides exceptional reading comfort. For more information contact your local authorized Apple dealer.

■ **SofTax** is a complete tax analysis, simulation, and preparation package.

Designed for individuals, partnerships, and corporations, it expands VisiCalc capability. The user can set up, modify, and finalize a model before SofTax prepares the final returns. The price is \$395. For more details contact Design Trends, P.O. Box G, Wilton, CT 06897; (203)834-1560.

■ **Teller Training and New Accounts Training** are programs available for the Apple II from Financial Technology, Inc. (FTI). These programs provide effective, individually paced training for your personnel. And the programs can be customized to conform to individual bank policies and regulations. For more information, contact Maureen Mack, FTI, 612 North Michigan Avenue, Chicago, IL 60611; (312)280-0600.

■ **BPI General Accounting** from Apple makes computerized accounting available to the small to mid-size business. A powerful, comprehensive, double-entry bookkeeping system designed by BPI Systems, Inc. for the Apple III, the BPI package does everything from preparing financial statements to writing checks and closing the books. More than a general ledger, it provides built-in integrated accounts-receivable, accounts-payable, and payroll functions.

The system reduces the task of preparing accounting and financial statements. You simply make entries in selected journals. Thereafter, posting ledgers, preparing financial statements, and closing the books are all accomplished automatically.

Fully menu driven and easy to use, BPI General Accounting allows you to generate and print more than 20 categories of management reports, such

as balance sheets, income statements, and payroll ledgers. It also lets you print out checks for payroll, accounts payable, and other expense accounts. For more information contact your authorized Apple dealer.

■ **Stock Focus** is a program designed to calculate objectively the underlying value of a stock based on capital structure and performance. The system was first developed by the management science department of a major money-center bank and is now in use by investment advisors, trust companies, and brokerage houses. It can plot an estimate of lowest value, highest value, and the current price. The cost is \$159 from High Technology Software, P.O. Box 60406, 1622 NW 23rd Street, Oklahoma City, OK 73146; (405)524-4359.

■ **First-Network**, from Sentra Securities Corporation, is the first electronic database/brokerage system designed to support independent financial planners and investment brokers.

As soon as First-Network verifies your access, you are on line, with access to the following financial applications:

- Electronic database inquiry
- Electronic mail
- Electronic news
- Tax shelter database
- Mutual fund database
- Trading strategies for stocks, options, and bonds
- Economic forecasting models

Software that runs on Apple computers is available for creating color graphics for client presentations, and for tracking clients' assets for monthly updating. Database-inquiry software is also available for integrating First-Network's forecasting models on inflation and interest rates.

By being able to call up and evaluate up to 50 variables on a given tax shelter or mutual fund, the planner can make the Apple act as a personal researcher, investment librarian, and statistician. For detailed information regarding First-Network, contact Sentra Securities Corporation, 409 Camino del Rio South, San Diego, CA 92108; (619)296-5885.

■ **Mike Weinberg's Estate Projector** is an estate-planning software program for insurance and financial-planning professionals. It provides customized estate and tax-projection printouts. Covering each year of the life expectancies of the client and the client's spouse, the program incorporates variable-inflation-rate and present-

value projections, and selected 0, 50, and 100 percent marital-deduction assumptions. The package is \$695. For more information contact Michael D. Weinberg Consultants, 4025 South Oneida Street, Denver CO 80237; (303)691-9813.

■ **The Apple-IBM Connection** is the first software package that enables computer users to transfer information back and forth easily between the Apple II and IBM PC™. In minutes, the software duplicates files created on one machine and transfers them into files that can be used on the other machine. It allows you to transfer VisiCalc models without having to invest hours manually re-entering the data or the formulas.

For specific information contact Alpha Software Corp., 6 New England Executive Park, Burlington, MA; (617)229-2924.

Publications:

■ **The Personal Business Computer Selection Guide for Brokers** was developed in conjunction with Exec Ed, Inc. to give brokers a working guide to purchasing a fully functioning personal computer system. It recommends software and hardware for a fully configured Apple system for a broker, and takes you through programs used by hundreds of brokers across the country. These programs cover tax planning, portfolio evaluations, electronic spreadsheets, database management, and other applications. (Exec Ed's primary service is training brokers in the use of these products and in the ways personal computers can increase their productivity.) The booklet retails for \$4.95. For more information on the booklet or the broker seminars, contact Exec Ed, Inc., 1060 Riker #18, Salinas, CA 93901; (408)758-2253.

■ **The VisiCalc Book, Apple Edition**, by Donald H. Beil, presents a straightforward approach to using VisiCalc productively on an Apple. It is intended to serve a variety of VisiCalc and potential VisiCalc users. Experienced VisiCalc users will find presentations on creating templates, preparing documentation, and training users, as well as recognizing, preventing, and correcting errors. Practice problems, examples, and figures illustrate for the novice how VisiCalc can be used. The book retails for \$14.95 and is published by Reston Publishing Company, Inc. in Reston, Virginia.

Apples and PEARS (continued from page 13)

Here, however, I would like to explain just one of the programs that makes my work easier.

Account Executives Need Information

The New York Stock Exchange requires that account executives keep a record of every purchase and sale for each client. This record must show the name of the stock, number of shares, and the price paid.

It is also necessary to maintain a cross-reference file. This file contains an alphabetical list of stocks with the name of each client who owns shares in that company, as well as the date of purchase, number of shares, and price paid. Not too long ago, these records—along with copies of the monthly statements mailed to the client—were the only available information we used. Today, however, we have each client's stock position on our desk terminal. This includes the client's security position, debit or credit balance, and buying power. This terminal also provides stock information, corporate news, and 200 pages of in-house sales ideas. In addition, the company computer furnishes printouts called the "Cross-Reference Report."

With all this information at my fingertips, why would I need a personal computer?

Once a security is delivered to the client, the company no longer has any record responsibility; but the account executive does. When answering questions as to the exact cost of a purchase, amount of money invested, or yield on the portfolio, the answers take quite a bit of time to come by.

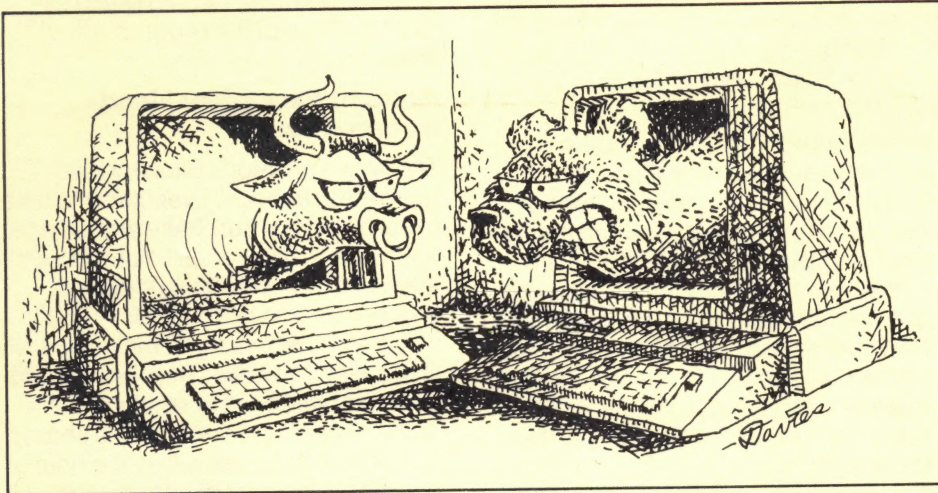
As for my hand-written "cross-reference file", forget it! Try as hard as I could, and using many new ideas to keep it current, it was always a mess. That is why I turned to the Portfolio Evaluation And Reporting System (PEAR).

PEAR Provides the Information

A record-keeping and reporting system, PEAR is plain and simple to use. It's designed for anyone in the securities industry, whether a stockbroker, investment advisor, or an investor with large holdings.

The system requires one-time entry of the client's name, account number, and social security number. It also requires a one-time entry of security in-

(continued on page 16)



formation, such as the name of the stock and the dividend paid (or, for bonds, the coupon and maturity date). From then on, you simply enter transactions.

When you sell a security, you enter the number of shares, proceeds, and date of sale. Your screen will then show you all open positions of the stock that you are selling, and the profit or loss that will be realized if you apply this sale to that particular purchase. You just choose the purchase and the program will set up a closed position.

If you sell a partial holding, PEAR will close out the sale and leave the balance in the portfolio, having adjusted the number of shares remaining and the purchase price. You have the option to price all the securities in your system, either manually or by simply dialing Dow Jones Quotes™ or Warner Computer Services (for a nominal fee when not accessing in prime time).

Having the current prices in the system, you can now generate the following reports for yourself and your client.

■ **Portfolio Review.** This review lists by category the number of shares, name of security, average cost per

share, total cost, current price, current market value, interest or dividend rate, annual income, yield, and percent of type or total in your portfolio. Subtotals are printed for each class of security; totals are printed at the bottom.

■ **Unrealized Capital Gains and Losses.** The columns are the same as in the Portfolio Review, but instead of the dividend information, we now have unrealized gains or losses listed in a "short term" column and totaled for each at the bottom.

■ **Realized Capital Gains and Losses.** This report lists the clients' trades for the year and shows both the long-term and short-term gains and losses with totals for each at the bottom.

■ **Cross-Reference Report.** I do not enter this information for my clients as this is above and beyond the call of duty. However, for my own account and for that very important client, it's great to have. It lists client holdings by security and also shows sales of long positions—making it equally advantageous to rebuy those stocks that were sold at higher prices.

■ **Log Report.** Similar to an audit trail, this report allows you to check

your entries of the day for accuracy and to have a hard copy report of the day's activity.

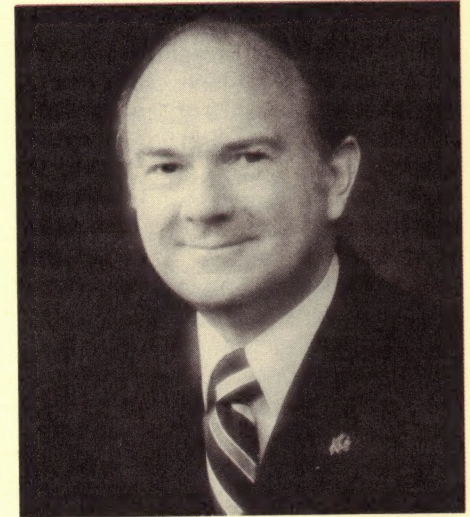
PEAR also handles stock splits automatically and has many other features too numerous to mention.

These are just some of the highlights of this helpful program that lead to client satisfaction. The one message that will come across to your clients is your efficiency in employing the latest techniques to provide precise answers quickly.

A booklet describing PEAR can be obtained by writing to PEAR SYSTEMS, 1044 Northern Boulevard, Roslyn, New York 11576.

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Note: The opinions expressed in this article are those of Mr. Appel's and do not in any way represent the policy of Thomson McKinnon Securities as to the use of personal computers.



About the author:

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